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ABSTRACT

Outcomes of a restructuring program implemented in the Fluvanna County High School, Help Instructional Growth Happen, are reported in this paper. Program goals were to: (1) establish a cooperative steering committee; (2) develop a cooperative learning language; and (3) implement interdisciplinary teacher teams. Three areas were evaluated--accountability, effectiveness, and impact. Methodology involved document analysis, observations, interviews, pre- and posttest teacher surveys, pre- and posttest surveys of a subsample of 40 students, and analysis of achievement scores. A more inclusive testing involved 159 students taking the pretest and 55 students taking the posttest. Twenty teachers took both the pre- and posttest. Findings indicate that students in the restructuring group scored higher in social studies and self-concept than those in the traditional group. Other outcomes included improved attendance and fewer disciplinary referrals. Participating teachers expressed positive or neutral responses. The low teacher response rate suggests problems in the program, such as time constraints, overly nontraditional concepts, inexperienced teachers, and curriculum training deficiencies. Supplementary teacher training and time are recommended. Six tables are included. (LMI)

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Final Evaluation Report
Chapter 2 Competitive Grant Program
HELP INSTRUCTIONAL GROWTH HAPPEN
Fluvanna County Public Schools
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Introduction

Restructuring schools to renew interest, to give birth to new ideas and to take advantage of local conditions has been hailed as the innovation that will provide leadership this century toward educational reform (Mojkowski, 1991). Principals' roles must change - to that of coach and facilitator, not manager of buildings and status quo. The daily tasks of leadership and decision making must be informed by a deep commitment to collaborative action and shared decision making. Restructuring involves change in three areas: the syllabus, the setting and the process. Change in the syllabus involves making the curriculum more than the content taught; that is, aligning skills and behaviors with content and building models that feature cross disciplinary, hands-on instruction. Change in the setting is to create an environment where leadership emerges from within. The setting must have opportunity to reinforce collaboration and cooperation. The change in process should include integration of learning and work, action-oriented problem-solving, team-development and comprehensive, coherent consistency.

Educational leaders in the Fluvanna County School System believe that too few students become fully involved in the high school learning process. Students fail to connect the facts that they learn either with the process involved in learning or with the activities of living. Hence, higher level cognitive skills are never utilized and students fail to achieve their academic potential. In a similar manner, teachers are asked to teach classes and subject matter rather than students. In the present high school setting, teachers are asked to teach a large number of students divided into five or six groups a fixed array of subject matter for less than an hour per day. Hence, teachers fail to get to know a vast majority of their students and the subject matter gets covered, as opposed to taught, regardless of relevance. Consequently, many students are dropping out either physically or mentally from school and its present environment.

The high school level is believed to be the most traditional, least effective and one of the most important educational levels in the Fluvanna County Schools. The major purpose of the Help Instructional Growth Happen project was and is to move Fluvanna County High School toward a model for effective instruction through restructuring. The project was proposed to: 1. support training for the organization and operation of a steering committee composed of teachers, students, support staff, administration and community leaders;

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2. develop a common language in the areas of cooperative learning and awareness using Madeline Hunter's Master Teaching (Hunter, 1976) concepts and training; and 3. implement curriculum and instructional strategies taught by interdisciplinary teacher teams (two to four members) and based on Leslie Hart's "brain-compatible" learning theories (Hart, 1983).

Evaluation questions/limitations.

It is assumed that the theory underpinning this project can be tested through a pilot study implemented with a subgroup of high school students. This assumption includes the limitation that in the pilot implementation of the project, the presence of non-pilot students will serve to provide a comparison group and will not corrupt the installation of the model. The primary evaluation questions of concern come from the potential of the model to improve school-related outcomes of teachers, students and parents.

Evaluation questions concerning the school and community included:

1. Will the school after the restructuring reflect more the values of the community than it does in the traditional organization?

2. Will the school after the restructuring be supported more by the community than it was in the traditional organization?

3. Will the school after the restructuring be more consistent with the community in such things as pace of life, taste and lifestyle than it does in the traditional organization?

4. Will the school after the restructuring have a higher rank in the minds of parents, teachers, students and community leaders than it did in the traditional organization?

Evaluation questions concerning the school and teachers included:

1. Will the teachers after school restructuring teach students more than they teach subject-matter ?

2. Will the teachers after school restructuring help more frequently individual students with their learning problems?

3. Will the teachers after school restructuring be more concerned with the whole child?

4. Will the teachers after school restructuring have more rapport with the students?

5. Will the teachers after school restructuring have more rapport with other members of the faculty?

6. Will the teachers after school restructuring be more cooperative.

Evaluation questions concerning the school and students included:

1. Will the students after school restructuring reach their potential more than they did in the traditional setting?

2. Will the students after school restructuring have better self concepts than they did in the traditional setting?

3. Will the students after school restructuring believe more that teachers care about them personally than they did in the traditional setting?

4. Will the students after school restructuring be more satisfied with school than they were in the traditional setting?

5. Will the students after school restructuring report that their parents are more satisfied with school than they were in the traditional setting?

6. Will the students after school restructuring achieve more academically than they did in the traditional setting?

Evaluation design

The evaluation design addressed three areas of evaluation inquiry: accountability, effectiveness and impact. The accountability area of inquiry focused on gathering evidence as to whether or not the intent of the proposal was carried out by the project. This component required site visits to review project documents, to make ethnographic observations and to conduct interviews to certify the implementation of the proposal.

The effectiveness analysis involved the collection of evidence that the proposed objectives were met. Included in this inquiry are: the collection of evidence that training of the teachers in management, in Mastery Teaching and in "brain-compatible" thematic teaching took place; that the thematic team approach to instruction was implemented; and that the school-within-a-school was implemented for the pilot. To address these inquiries the evaluator utilized site-visits and a survey of the teachers. The teachers where surveyed on a pretest-posttest basis with regard to their prior experience with team teaching, their opinions of student and community status and their interrelationships.

The impact analysis focused on the evaluative questions previously stated in this report. The address of these questions used the pretest-posttest teacher surveys and a quasi-experimental treatment of a sample of the students in the pilot. A sample of forty students were chosen from each of four grades: eight, nine, ten and eleven. This sample was chosen to be

representative of the grade, such that when the student body was divided into two groups randomly in the pilot, a proportional representation of each group remained in the sample. Pretest-posttest questionnaires were used with this sample and achievement scores were gathered for them for comparison.

Methods of Study

1. Data collection techniques included ethnographic observation, archives review, survey, magnitude scaling and standardized achievement testing were the data collection strategies employed. Observations were gained through evaluator site visits. On site visits, the evaluator interviewed teachers, visited classrooms and reviewed project related records and minutes. Questionnaires were developed to collect information from teachers and students. Both questionnaires were developed with pretest-posttest use in mind, drafted by the evaluator and reviewed by school system personnel. The student questionnaire was then pretested with a small sample of Fluvanna students not chosen for the quasi-experimental design. After the student questionnaire had been revised, the school system administration distributed the teacher and student questionnaires and completed the data collection. The standardized tests were administered by school staff in prescheduled time periods.

2. Data collection instruments included student and teacher questionnaires which are enclosed in the appendices. The Stanford Achievement Test was administered in Spring of year one and year two. Normal Curve Equivalents (NCEs) were used for analysis of the achievement data, because of the characteristic of their distribution that the NCE would remain the same across any full year of growth.

The standard limitations associated with local evaluations like this are: data collection instruments are program specific, locally developed instruments have not been pretested, scales have not been studied for reliability, and data collection depends too much on self-reports. The data collection instruments in this case are program specific and do, to some degree, depend on self reports. Yet, the surveys were pretested and there are confirmatory measures for each evaluative concern.

Analysis

The analyses used to investigate the impact questions are standard survey research analyses. Crosstabulations and frequencies were used to describe the sample and response rates. Listing of evidence and results of archive analyses and interviews constituted the analysis of data for the accountability and effectiveness inquiries. The pretest/posttest survey of teachers, the pretest/posttest survey of the sample of students, a subgroup of which were randomly assigned to the pilot project from the traditional school program, and the

pretest/posttest achievement test scores were subjected to either two-way analysis of variance, dependent t-tests or Goodman tests to establish the probability of differences due to the restructuring.

Specific tests were assigned by impact question and whether or not the item could be considered a continuous variable. The analyses of variance and dependent t-tests were used for continuous variables and the Goodman (partitioned chi square and normal curve) tests were used for ordinal categorical variables.

In the two way analysis of variance, pretest/posttest was used as one classification and status of participation in the treatment as the second. This model was set up when there were potential differences in the pretest across groups or when nonresponse reduced the posttest sample size considerably. The test utilized from the model was the test of interaction which would indicate differential movement or change.

The dependent t-test model was established when there was no large discrepancy across groups with regard to percent of nonresponse and when a responding bias by individual may exist in both pretest and posttest. The test used was the t statistic to indicate change in the individuals in the model, hence the pretest and posttest had to have the same responding sample.

The Goodman test is a test of interaction for the standard chi square statistic when the two variables in the model are dichotomies. The test is conducted through partitioning chi square test statistics and using ratios to estimate probabilities needed to generate a test of interaction using the normal curve. One dichotomous variable in the model was status of participation in the treatment and the other dichotomous variable consisted of a categorical variable of interest.

Interpretive Limitations

Much of the information relative to changes in teachers and in the attitudes/behaviors of students is based on the self reports of the subjects. It is assumed that the potential for the self reports to lack accuracy is as likely in both of the treatment groups: the students in the restructured program and the students in the traditional program.

The lack of response on the posttest potentially reflects a busy teacher or student schedule and apathy on the part of either the students who were asked to respond or the teachers who administered the questions. The lower response by teachers suggested disinterest in reporting by both parties. The similarity of nonresponse across treatment and traditional subsamples is the basis of our belief that the nonresponse behavior is not related to the restructuring.

Results of the Analyses

The sample of students collected in the pretest represented the proportions of sex, race and participation of the universe of students in Fluvanna County High School. Table 1 reports the pretest/posttest percentages. Nonresponse appears to be proportional across grade levels, gender and ethnicity. A greater proportion of sports participants and a lower proportion of school activity participants responded on the posttest.

Table 1: Characteristics of Students Responding to Pretest and Posttest Surveys on School Quality and Perceptions

Characteristic/Value	Pretest		Posttest	
	Number	Percent	Number	Percent
Grade				
08 / 09	37	23.3	18	32.7
09 / 10	40	25.2	15	27.3
10 / 11	47	29.6	9	16.4
11 / 12	35	22.0	13	23.6
Total	159	100.0	55	100.0
Gender				
male	67	42.1	22	40.0
female	92	57.9	33	60.0
Total	159	100.0	55	100.0
Ethnicity				
white	113	71.1	41	74.5
black	44	27.7	14	25.5
Asian	1	0.6	0	0.0
AmIndian	1	0.6	0	0.0
Total	159	100.0	55	100.0
On Sports Teams				
yes	51	32.3	27	49.1
no	107	67.7	28	50.9
Total	158	100.0	55	100.0
In School Activities				
yes	55	34.6	26	47.3
no	104	65.4	29	52.7
Total	159	100.0	55	100.0
Staff Confide In				
yes	84	53.2	34	61.8
no	74	46.8	21	38.2
Total	158	100.0	55	100.0

The predominant sports participated in by students were football by approximately twenty percent, cheerleading by sixteen percent and basketball by fourteen percent. These percents are distributed proportionally for restructured and traditional groups, and pretest and posttest groups. The predominant activities participated in by the students were band by approximately twenty percent, plays and drama by sixteen percent and beta club by eleven percent. These percents are distributed proportionally for restructured and traditional groups, and pretest and posttest groups.

English was identified as the favorite subject of the traditional group and mathematics was the favorite course of the restructured group. Both courses formed the second place for the groups. Overall, English was the favorite of seventeen percent of the students, mathematics was picked by thirteen percent, algebra I by eight percent and geometry by seven percent. English was identified as the least-liked course by both groups and by eighteen percent of the students. Mathematics was second by sixteen percent of the students, Spanish by thirteen percent and Science by eleven percent. This order of least liked curricular areas was maintained in the posttest.

The students report a multitude of reasons for liking their favorite teacher. Most of the reasons fall in the interpersonal interaction area. A slight majority of the students report that they have a member of the school staff as someone that they can confide in. Teachers were the most mentioned. Again these data appear proportionally distributed between groups.

Better than ninety-eight percent of the students plan to complete high school. Seventy percent plan to go to college. Ninety-five percent report that they get along with their classmates. Ninety-one percent report that they get along with their teachers. About thirty-five percent of the students report a self concept that is above average and sixty percent report an average self concept.

In Table 2 are shown the grades for the principal courses for the entire sample studied. Grades were proportionally distributed across groups and appear representative of the total student body.

Table 2: Grades of Students in Sample

Grade	Science		History		English		Mathematics	
	#	%	#	%	#	%	#	%
a	32	32.7	39	29.5	29	18.7	33	22.9
b	36	36.7	44	33.3	61	39.4	61	42.4
c	20	20.4	35	26.5	53	34.2	25	17.4
d	8	8.2	10	7.6	9	5.8	15	10.4
f	2	2.0	3	2.3	2	1.3	10	6.9

Almost all of the students reported a career desired. Most of these were different, but all were good middle and upper class occupations. The students for the entire sample reported a high rate of parental interaction in discussing school. Almost eighty-eight percent reported a "yes" and this percentage was approximately equal between groups. Eighty-two percent reported that parents kept up with their school progress. Again, both groups were similar. Only sixty-one percent reported that their parents visited school. This report was slightly higher for the restructured group on the pretest. Only thirty-five percent of the sample reported that their parents monitored homework. Again, both groups were similar.

Students in the sample appeared normal with regard to their satisfaction with school. Almost fifteen percent were very satisfied, sixty-three percent somewhat satisfied and twenty-two percent only a little satisfied. The sample was split (fifty-three to forty-seven percent) in believing that the school cared about them personally.

The universe of teachers at Fluvanna County High School were surveyed and twenty-eight responses were obtained on the pretest. Twenty-two responses were obtained on the posttest with only two not overlapping. Thirty percent of the teachers are male and sixty percent of the teachers plan to stay in teaching as a career. Only twelve (43%) of the teachers had experience with any type of team-teaching before the start of the project and only nine (32%) enjoyed the experience. The average experience of the faculty was about eleven years. The same average was found for the posttest respondents.

Student Results.

In Table 3 are reported the results of the Goodman Test of interaction. Self-ratings with regard to health, athletics and intellect were higher on the posttest for the restructured group. There was a large difference with regard to parents visiting school for the restructured group.

Table 3: Comparisons of Student Questionnaire - Goodman's Test

Item	Traditional Group		Restructured Group		crit ratio	sign
	% yes	% no	% yes	% no		
Part. Sch. Activities	47.4	52.6	36.9	63.1	0.43	ns
Rate Health good	47.4	52.6	30.6	69.4	1.66	yes
Rate Athletics good	38.9	61.1	19.9	80.1	1.98	yes
Rate Appearance good	26.3	73.7	15.1	84.9	1.20	no
Rate Intellect good	52.6	47.4	23.3	75.1	2.76	yes
Rate Citizenship good	31.6	68.4	23.6	71.7	0.65	no
Rate Likeability good	52.6	48.4	35.9	60.9	1.51	no
Parents Visit School	88.2	11.8	56.8	43.2	2.27	yes

In Table 4 are shown the results of the magnitude scaled impact questions on the students' questionnaire. No significant differences ($p < 0.05$) were found between the groups when controlling for pretest differences.

In both groups, students reported that parents and students are somewhat satisfied with school. The students are undecided as to whether the school reflects the community, but they generally believe that the community supports the school.

The students rank the school as high, but believe that teachers still teach subjects rather than students. The school has consistent values with the community and teachers do help students.

In Table 5 are reported the dependent t-tests for the two groups of students. Only one achievement area showed any significant ($p < 0.05$) differences between groups, although five of the six other content areas showed trends toward differences. These groups failed to show significance in the differences observed most likely due to the small sample size of students in the restructured group for which achievement scores were present.

Table 4: Comparisons of Student Questionnaire - ANOVA Interaction

Item	Restructured Group			Traditional Group			F	sign	D i r
	mean	standev	n	mean	standev	n			
Parents Satis. PRE	2.00	0.603	12	1.80	0.447	139	0.58	ns	d
POST	1.81	0.597	5	1.87	0.696	49			
Students Satis. PRE	2.31	0.480	13	2.06	0.610	140	0.78	ns	d
POST	2.00	0.707	5	2.04	0.576	49			
Reflects Comm. PRE	2.50	1.314	12	2.68	1.418	136	0.42	ns	d
values POST	2.50	0.577	4	2.85	1.233	47			
Comm. supports PRE	2.34	1.231	13	2.77	3.842	136	0.19	ns	d
school POST	3.25	0.500	4	2.80	1.167	46			
School Rank PRE	1.81	0.947	13	2.23	1.132	136	0.15	ns	a
POST	2.00	0.817	4	2.67	1.076	46			
Teachers teach PRE	2.58	1.566	13	2.70	1.426	134	0.31	ns	a
students POST	3.25	0.957	4	2.92	1.182	48			
School consist PRE	2.65	1.420	13	2.90	1.371	135	0.21	ns	a
community POST	2.75	0.957	4	3.13	1.123	48			
Teachers help PRE	3.31	1.378	13	3.11	1.422	135	0.06	ns	a
students POST	3.50	1.291	4	3.51	1.159	47			

The area of differences, social studies, and the areas of trends all favored the restructured group. Other student differences can be found in the school records where project students have lower rates of absenteeism, fewer incidents of discipline referrals (19.7%), and a lower percentage receiving F's than students in the traditionally structured program.

Table 5: Comparisons of Student Achievement Data

Item	Restructured Group			Traditional Group			t	df	sign
	mean	standev	n	mean	standev	n			
Reading Compre	58.0	32.03	9	52.6	27.60	83	0.55	90	ns
Mathematics	55.2	37.27	9	45.4	29.39	83	0.92	90	ns
Writing	58.8	32.59	9	56.4	27.91	83	0.24	90	ns
Information	63.8	28.53	9	53.1	27.87	82	1.08	89	ns
Basic Skills	60.0	32.68	9	52.4	28.26	82	0.75	89	ns
Social Studies	65.3	26.28	9	49.0	27.94	83	1.67	90	yes
Science	65.4	29.88	9	51.7	28.25	83	1.38	90	ns
Comprehensive	61.9	30.73	9	51.8	28.01	82	1.01	89	ns

In Table 6 are shown the results of the pretest/posttest survey of the teachers. One may speculate that teachers may feel more negative at the end of the year than at the beginning and that the project did not underlie the negative results found in three areas or one could posit that the implementation of the project made teachers believe that students were not reaching their potential, that their colleagues were not cooperative and that colleagues outside their area were less competent. The project teachers were not as negative as the non-project teachers and showed a tendency to serve as advocates for the students in their group.

Significant ($p < 0.05$) dependent t 's were found for all three of these magnitude scaled questions. No other differences were found significant ($p < 0.05$) on the remainder of the magnitude scaled items. Teachers do believe: the school does not reflect the community, the community supports the school, the school is of average rank, teachers teach students as opposed to subjects, the school has values consistent with the community, students are somewhat happy, teachers are concerned about the whole child, student rapport with teachers is low, teacher rapport with colleagues is high and teacher competence is lower than desired. These beliefs appear in both teacher pretest and posttest summaries, and are more positive for the teachers in the project. Teachers in the restructuring group believe that they have more rapport with their students.

Table 6: Comparisons of Teacher Questionnaire

Item	Pretest		Posttest		n	t	df	sign	d
	mean	standev	mean	standev					
Reflects Commu Val	2.15	0.689	1.61	0.870	13	1.57	12	ns	d
Commu Supports Sch	2.84	0.900	2.58	0.672	13	1.07	12	ns	d
School rank	2.75	0.622	2.54	0.941	12	1.45	11	ns	a
Teachers Teach Std	2.84	0.987	2.42	0.760	13	1.47	12	ns	a
School Consist Com	3.69	0.630	3.54	1.030	13	0.48	12	ns	a
Students Reach Pot	3.46	0.877	2.69	0.723	13	2.80	12	yes	d
Students Are Happy	2.69	1.182	2.54	0.749	13	0.53	12	ns	d
Teachers Whole Std	2.77	0.832	2.50	0.736	13	1.07	12	ns	d
Student Rapport	2.46	0.660	2.08	0.813	13	1.38	12	ns	d
Faculty Rapport	3.15	0.987	2.73	0.992	13	1.35	12	ns	d
Faculty Cooperativ	3.15	0.899	2.73	0.857	13	1.82	12	yes	d
Faculty Competence	1.72	0.905	1.41	1.045	11	1.08	10	ns	d
Faculty Ext Compet	2.46	0.776	2.00	0.764	13	2.01	12	yes	d

Findings related to each evaluation question including interpretations. Four site visits accompanied by discussions with project participants, students and teachers, attest to the implementation of the proposal and the meeting of the accountability aspects of this evaluation. The teachers planned together and the students in the restructured part of the high school reveled at the differences in their curriculum. Other teachers confessed to their lack of knowledge of what was happening to the other group, but did point out that they (the teachers participating in restructuring) were doing something unconventional.

With regard to the effectiveness of the provision-related objectives stated in the proposal, the school system staff were able to accomplish all. A steering committee was established and did operate doing the duration of the project to satisfy Objective I. Evidence was reviewed by the evaluator to attest to the successful conduct of activities one (the determination of staff knowledge base relevant to the project), three (the establishment of the steering committee), and four (the relating of at-risk students' parents to project decision-making to

increase parent involvement) for this objective. An evaluator oversight resulted in not seeking evidence for the satisfaction of activity two (training in site-based management).

Evidence of the successful conduct of all three activities required to meet Objective II was reviewed and found convincing. The staff was surveyed to complete activity one; both the Hunter and Hart training were given to the faculty and were well received by them, and teachers were provided with opportunities to observe and coach one another.

Evidence of the successful completion of activities one and three for Objective III was reviewed by the evaluator. The interdisciplinary teams operated for the duration of the past academic year, satisfying the first activity. The evaluator did not review any of the criterion-referenced tests, stated in activity three. Teacher teams did have common planning time to satisfy activity three.

For Objective IV, evidence of the successful completion of activities one, three and four was reviewed. For activity one, a school-within-a-school approach, along the lines of the magnet school, was successfully established. The evaluator did not review the teacher made tests or test results named in the second activity. The thematic curriculum named in activity three was implemented and the pilot stipulated in activity four was carried out.

The analyses reported earlier also permitted the addressing of evaluation questions pertinent to the restructuring project. Each question was addressed individually.

Evaluation questions concerning the school and community include:

1. Will the school after the restructuring reflect more the values of the community than it does in the traditional organization?

Both teachers and students believe "no". The school does not after restructuring reflect community values more than the traditional school did.

2. Will the school after the restructuring be supported more by the community than it was in the traditional organization?

Both teachers and students believe "no". The school does not after restructuring receive more support from the community than it did under the traditional organization.

3. Will the school after the restructuring be more consistent with the community in such things as pace of life, taste and lifestyle than it does in the traditional organization?

Both teachers and students believe "no". The school after restructuring will not be more consistent with community life than the traditional school.

4. Will the school after the restructuring have a higher rank in the minds of parents, teachers, students and community leaders than it did in the traditional organization?

Both teachers and students believe "no". The school after restructuring does not have a higher rank than it did under the traditional organization.

Evaluation questions concerning the school and teachers include:

1. Will the teachers after school restructuring teach students more than they teach subject-matter ?

Both teachers and students believe "no". Teachers after restructuring will not teach students more than subjects any more than they did in the traditionally organized school.

2. Will the teachers after school restructuring help more frequently individual students with their learning problems?

The students do not believe that teachers helped students more under the restructured organization than under the traditional organization.

3. Will the teachers after school restructuring be more concerned with the whole child?

Teachers did not feel that they were more concerned with the whole child under the restructured organization than under the traditional organization.

4. Will the teachers after school restructuring have more rapport with the students?

Generally, teachers did not feel that they would have more student rapport after restructuring than they do under the traditional organization. However, the teachers in the pilot restructuring did feel that they had more rapport and did assume a position of advocacy of the students in their group.

5. Will the teachers after school restructuring have more rapport with other members of the faculty?

Teachers did not feel that they would have more rapport with other teachers after restructuring than they do under the traditional organization. Pilot teachers felt that they had more

rapport with their colleagues, but several teachers in the traditionally organized program appeared to resent the pilot teachers.

6. Will the teachers after school restructuring be more cooperative.

The teachers felt that they were more cooperative under the traditional organization than after restructuring, yet twelve of these teachers have applied to participate in the restructuring for the coming school year.

Evaluation questions concerning the school and students include:

1. Will the students after school restructuring reach their potential more than they did in the traditional setting?

Overall, the teachers felt that the students were less likely to reach their potential after restructuring than they were before. This belief was not held by most of the project teachers.

2. Will the students after school restructuring have better self concepts than they did in the traditional setting?

The students were shown to have better self concepts with regard to health, athletics and intellect after restructuring than before restructuring. There was no change as to self concept for appearance, citizenship and likeability. The project group had fewer discipline referrals.

3. Will the students after school restructuring believe more that teachers care about them personally than they did in the traditional setting?

Response was too small to analyze this item for change, but responses on similar constructs suggest that they would not change as to their beliefs in teachers caring more.

4. Will the students after school restructuring be more satisfied with school than they were in the traditional setting?

The students who underwent restructuring were not significantly ($p < 0.05$) more satisfied with school than were the students in the traditionally organized part of school. However, restructuring appeared to increase the satisfaction of the few in the project and the project students had higher attendance rates.

5. Will the students after school restructuring report that their parents are more satisfied with school than they were in the traditional setting?

The students who underwent restructuring reported that their parents' satisfaction was at a level not significantly ($p < 0.05$)

different than the level of parent satisfaction reported by the students in the traditionally organized part of school.

6. Will the students after school restructuring achieve more academically than they did in the traditional setting?

One of the content areas on the standardized tests suggested significant ($p < 0.05$) differences found between the two groups of students. Students from the restructured group scored higher in social studies than did students from the traditional group.

Summary of Results

Personnel at Fluvanna County High School became aware that students attending the school were not reaching their full potential. It was hypothesized that reasons for this short-fall could be traced to their lack of involvement in their education. A restructuring of the high school was designed using the mastery teaching approach of Hunter, the "brain-compatible" curriculum approach of Hart and teacher teaming. The curriculum developed was a thematic, project or activity based curriculum with contracting and point exchange as motivating factors.

It was further hypothesized that this restructuring would serve to renew the enthusiasm of teachers and would result in a more "open" teaching environment than exists in the traditional setting. Hence, the restructuring would result in more teacher decision making, consistency of curriculum and more attention to the individual child.

Salient Findings

A pilot test of the restructuring process was implemented by randomly selecting a subgroup of one hundred students to participate in testing the planned program. A quasi-experimental design was employed to evaluate this pilot. Teachers and students were surveyed on a pretest-posttest basis and student achievement test scores were analyzed in an effort to test the hypotheses set up through the restructuring.

Two of the six experimental hypotheses concerning changes in the students were, at least, partially validated. Although students did not improve on reading comprehension, mathematics, science, writing, general information and basic skills, the students in the restructuring group did score higher in social studies than did those in the traditionally organized group. Students in the restructuring group also had higher self concepts, higher attendance, fewer discipline referrals, and better school attitudes than those in the traditionally organized group.

None of the six teacher related nor any of the four community related hypotheses were validated. This may be due to the poor student return on the posttest or to the apparent teacher dislike of the restructured school program. Only those

teachers in the experiment seemed positive or neutral about the program. Their neutrality most likely can be attributed to their lack of self confidence in their skills and to the lack of duration of the project. The teachers in the pilot program lacked time to develop the curriculum, to grow into their roles and to become comfortable with what they were doing. Yet, twelve additional faculty have asked to undergo the restructuring this year and none of the pilot staff wanted to go back to the traditional structure.

Conclusions

The low response rate on the part of the students and the negative posttest responses of the teachers suggest that something went wrong. Several conjectures can be made as to what went wrong. They include: the teachers in the traditional setting believed that too much attention was being spent on the project teachers; there was not enough time allowed for the project teachers to develop a competitive thematic curriculum (the evaluator believes that the continuous progress curriculum coming out of the works of Lewin, Postman and Brunswik may be more appropriate for the curriculum work); the concept was too far out for the conservative middle-classed community; the teachers were too inexperienced in team-teaching for the project to work smoothly the first year; the Hunter and Hart materials did not work (there have been several substantial challenges to the "brain-compatible" curriculum theory based on research results and we have evaluated several Hunter workshops which apparently had no effect on faculty); and the low response rate hid evidence to validate the other hypotheses.

The project was carried out as proposed and effectiveness data at intermediate stages suggested that the project was doing well. Yet, only a few hypotheses were validated. We think as evaluators that the project did not have enough time to allow the project teachers to become "good" at it; that more substantial training is needed than is provided by Hunter and Hart theories; and that at the risk of losing the quasi-experimental design, the project must be tried with the whole school and faculty.

Bibliography

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